

Application Serial No. 10/607,275  
Response after final dated June 14, 2005  
Reply to final Office action of March 24, 2005

REMARKS

Claims 1 through 22 are pending in this application. Further reconsideration is requested based on the following remarks.

Response to Arguments:

The Applicants appreciate the consideration of their arguments, as well as entry of the replacement drawing.

The definition of a circuit cited in the final Office action, *i.e.* "An arrangement of interconnected component parts", would seem to fit any device with more than one component part. What isn't a circuit, according to the definition cited in the final Office action? A pair of scissors or a tricycle would be considered to be circuits, according to the definition of a circuit selected by the final Office action, since both scissors and tricycles are arrangements of interconnected component parts. Valve package 72 is only a valve package, as described by Rolfes at column 4, lines 30 and 31, not a hydraulic circuit, regardless of whether or not the final Office action chooses to call it a hydraulic circuit.

The final Office action asserts that "as clearly shown in figure 2 and perfectly understood by person of ordinary skill in the art, circuit of Rolfes permits its user independently operate two or more actuators in either directions by manipulation of the operating levers 50-52."

Claim 14, however, recites a hydraulic circuit being configured to permit flow through the hydraulic circuit *concurrently* both a) to-or-from a first outlet ports *and* b) to-or-from a second outlet ports, not independently. The meaning of the word "concurrently" is different than the meaning of the word "independently". Fig. 2 of Rolfes does not show two or more actuators being operated *concurrently*, regardless of whether or not it shows actuators that can operate independently.

Fig. 2, in particular, shows *only* cylinder 48 being operated, albeit in neutral. Outlet lines 98 of cylinder 48 may be seen in Fig. 2 to be connected through valve 104 to hydraulic inlet line 92. Outlet lines 96 of cylinder 42, on the other hand, may be seen to dead-end at valve 102. Cylinder 42 is thus not operating *concurrently* with cylinder 48.

Similarly, outlet lines 94 of cylinder 40 may be seen to dead-end at valve 100. Therefore, cylinder 40 is not operating *concurrently* with cylinder 48 either.

Application Serial No. 10/607,275  
Response after final dated June 14, 2005  
Reply to final Office action of March 24, 2005

Since *only* outlet lines 98 of cylinder 48 are connected through valve 104 to hydraulic inlet line 92, *only* cylinder 48 is being operated. This is to be contrasted with claim 14, which recites a hydraulic circuit being configured to permit flow through the hydraulic circuit *concurrently* both a) to-or-from a first outlet ports *and* b) to-or-from a second outlet ports.

Furthermore, as Rolfe himself describes at column 5, lines 64-67,

"The valves 100, 102, and 104 can then be actuated from inside the tractor via the control levers 50, 51 and 52 to selectively supply fluid pressure to the cylinders 40, 42 and 48."

The fact that fluid pressure is supplied *selectively* to the cylinders 40, 42 and 48 implies that only one cylinder will be *selected* to receive fluid pressure at any given time. This is to be contrasted with claim 14, which recites a hydraulic circuit being configured to permit flow through the hydraulic circuit *concurrently* both a) to-or-from a first outlet ports *and* b) to-or-from a second outlet ports.

Additionally, valve package 72 is a breakaway valve that goes on the back of tractor 10 to increase the number of outlets available for each individual function, as described at column 4, lines 30, 31, and 54-69. The flow of fluid from inputs 90 and 92 to each pair of outlets 94, 96, and 98 is controlled by spool valves 100, 102, and 104. Each of spool valves 100, 102, and 104, in turn, is operated by its own control lever 50, 51, or 52, as described at column 5, lines 3-7 and 12-15. The flow of hydraulic fluid is thus split three ways, and if more than one of cylinders 100, 102, or 104 were operated *concurrently* neither one would receive its requisite pressure head of fluid.

Finally, the exhaust of any one of cylinders 100, 102, or 104 feeds the input of another cylinder, as may be seen in Fig. 2. If two or more of cylinders 100, 102, or 104 were operated concurrently, the exhaust fluid from an upstream cylinder would have to supply fluid to an inlet of a downstream cylinder. Thus, for example, if both of cylinders 42 and 48 were set in motion by moving spool valves 102 and 104 to their direct positions, the hydraulic fluid exhausting from cylinder 48 would be fed to the inlet of cylinder 42. The flow from cylinder 48, however, will stop when the piston inside cylinder 48 bottoms out at the end of its stroke, and cylinder 42, robbed of input fluid, will cease to operate. Thus, if more than one of cylinders 100, 102, or 104 were operated concurrently, the flow of hydraulic fluid from an upstream one of the cylinders would

Application Serial No. 10/607,275  
Response after final dated June 14, 2005  
Reply to final Office action of March 24, 2005

be cut off when the piston in that cylinder bottomed out, cutting off flow into a downstream cylinder. Not only is this kind of intermittent operation of the downstream cylinder undesirable, but it obviates concurrent operation of hydraulic cylinders 100, 102, or 104 as well.

Claim Rejections - 35 U.S.C. § 102:

Claims 14 through 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Rofles, US 3,985,394. The rejection is traversed. Reconsideration is earnestly solicited.

Claim 14 recites:

"said hydraulic circuit being configured to permit flow through said hydraulic circuit concurrently both a) to-or-from said first outlet ports and b) to-or-from said second outlet ports."

Rofles neither teaches, discloses, nor suggests a hydraulic circuit being configured to permit flow through the hydraulic circuit *concurrently* both a) to-or-from first outlet ports and b) to-or-from second outlet ports, as recited in claim 14. Furthermore, valve package 72 is a valve package, as described at column 4, lines 30 and 31, not a hydraulic circuit, contrary to the assertion in the final Office action.

In Rofles, rather, *each* pair of outlet lines 94, 96, and 98 running through one of hydraulic cylinders 40, 42, and 48 comprises a *separate* hydraulic circuit with each one of control valves 100, 102, or 104. Thus, in Rofles, each of control valves 100, 102, and 104 respectively control the flow of fluid between the inlet lines and *one* pair of outlet lines, as described at column 5, lines 4-6. Since each of control valves 100, 102, and 104 respectively controls the flow of fluid between the inlet lines and one pair of outlet lines, there is no way to permit flow through the hydraulic circuit *concurrently* both a) to-or-from first outlet ports *and* b) to-or-from second outlet ports, as recited in claim 14.

Furthermore, fluid pressure is supplied selectively to cylinders 40, 42, and 48, as described at column 5, lines 66 and 67. Since fluid pressure is supplied selectively, it is not supplied concurrently. Claim 14 is submitted to be allowable. Withdrawal of the rejection of claim 14 is earnestly solicited.

Claims 15, 16, and 17 depend from claim 14 and add additional distinguishing elements. Claims 15, 16, and 17 are thus also submitted to be allowable. Withdrawal of the rejection of claims 15, 16, and 17 is earnestly solicited.

Application Serial No. 10/607,275  
Response after final dated June 14, 2005  
Reply to final Office action of March 24, 2005

Claim 18 recites:

- "b) supplying hydraulic fluid fed into said feed port in a direction along a first circulation path through said hydraulic circuit to cause a first hydraulic drive to operate a power function of said utility mechanism;
- c) supplying hydraulic fluid fed into said feed port in a direction along a second circulation path through said hydraulic circuit to cause a second hydraulic drive to operate a position function of said utility mechanism; and
- d) concurrently performing said steps b) and c) while said utility vehicle is driven."

Rofles neither teaches, discloses, nor suggests a hydraulic circuit being configured to permit flow through the hydraulic circuit *concurrently* to cause a first hydraulic drive to operate a power function of said utility mechanism and to cause a second hydraulic drive to operate a position function of said utility mechanism, as recited in claim 18. In addition, valve package 72 is a valve package, as described at column 4, lines 30 and 31, not a hydraulic circuit, contrary to the assertion in the final Office action.

In Rofles, rather, *each* pair of outlet lines 94, 96, and 98 running through one of hydraulic cylinders 40, 42, and 48 comprises a *separate* hydraulic circuit with each one of control valves 100, 102, or 104, as discussed above. Thus, in Rofles, each of control valves 100, 102, and 104 respectively control the flow of fluid between the inlet lines and *one* pair of outlet lines, as described at column 5, lines 4-6. Since each of control valves 100, 102, and 104 respectively controls the flow of fluid between the inlet lines and one pair of outlet lines, there is no way to permit flow through the hydraulic circuit concurrently to cause a first hydraulic drive to operate a power function of said utility mechanism and to cause a second hydraulic drive to operate a position function of said utility mechanism, as recited in claim 18. Claim 18 is submitted to be allowable. Withdrawal of the rejection of claim 14 is earnestly solicited.

Claims 19, 20, and 21 depend from claim 18 and add additional distinguishing elements. Claims 19, 20, and 21 are thus also submitted to be allowable. Withdrawal of the rejection of claims 19, 20, and 21 is earnestly solicited.

Allowable Subject Matter:

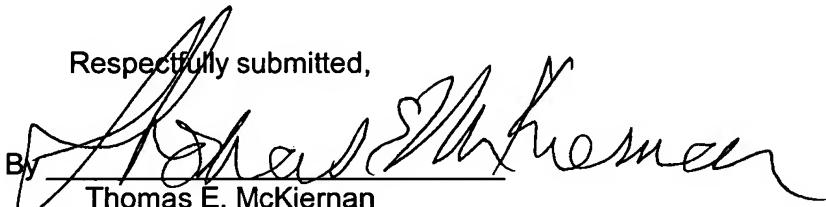
The Applicant appreciates the allowance of claims 1 through 13, and the indication that

Application Serial No. 10/607,275  
Response after final dated June 14, 2005  
Reply to final Office action of March 24, 2005

claims 21 and 22 contain allowable subject matter.

Conclusion:

Accordingly, in view of the reasons given above, it is submitted that all claims 1 through 22 are allowable over the cited references. Allowance of all claims 1 through 22 and of this entire application are therefore respectfully requested.

Respectfully submitted,  
  
By \_\_\_\_\_  
Thomas E. McKiernan  
Reg. No. 37,889  
Attorney for Applicants  
ROTHWELL, FIGG, ERNST & MANBECK  
Suite 800, 1425 K Street, N.W.  
Washington, D.C. 20005  
Telephone: (202)783-6040

1994-284-am2